

Sensing

Applications

- Ear thermometers
- Non-contact thermometers

Features

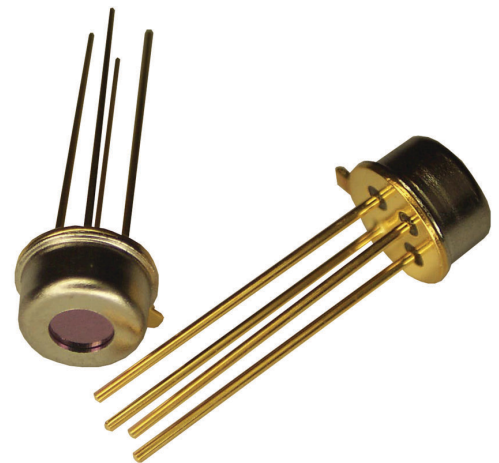
- Small-size sensor (TO-46 package)
- Included ambient temperature (thermistor) sensor for compensation
- High sensitivity
- Fast response time
- Low cost

This thermopile sensor is used for non-contact surface temperature measuring. The ZTP-135SR model consists of thermo-elements, flat IR filter, a thermistor for temperature compensation in a hermetically-sealed TO-46(18) package. There is also a variety of filters available to help maximize performance in specific applications.

ZTP-135SR

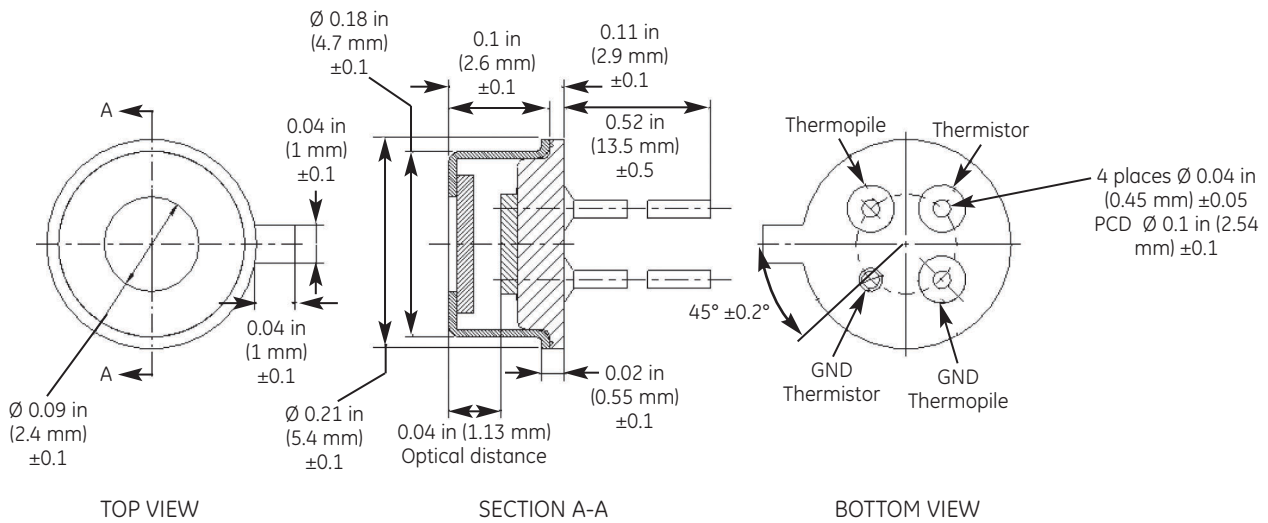
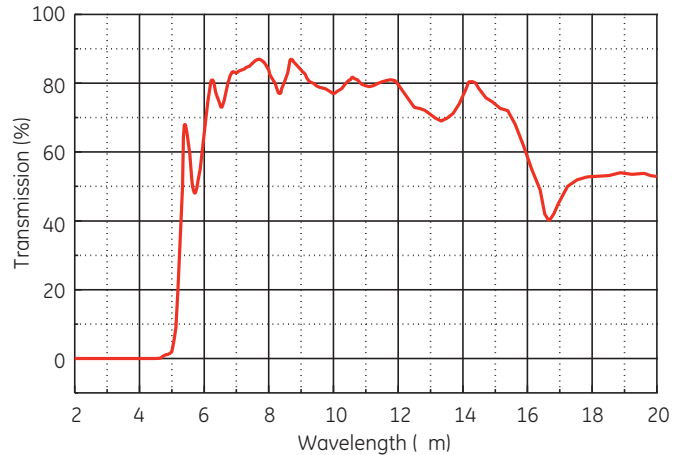
Thermometrics IR Sensor

ZTP-135SR is a Thermometrics product. Thermometrics has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



ZTP-135SR Specifications

Parameter	Unit	Value	Condition
Chip Size	mm ²	1.8 x 1.8	-
Diaphragm Size	mm ²	1.4 x 1.4	-
Number of Couples	-	60	-
Active Area	mm ²	0.7 x 0.7	-
Internal Resistance	kΩ	60 ±30%	@ 77°F (25°C)
Resistance T.C.	% °F (°C)	< 0.12	-
Responsivity	V/W	62 ±30%	500K, 1 Hz
Responsivity T.C.	% °F (°C)	0.10	Typical
Noise Voltage	nV rms	32	R.M.S, Typical
NEP	nW/√Hz	0.51	500K, 1 Hz, Typical
Detectivity	cn √Hz/W	1.35E + 08	500K, 1 Hz, Typical
Time Constant	ms	25	500K, 1 Hz, Typical
Operating Temperature	°F (°C)	-4°F to 212°F (-20°C to 100°C)	-
Storage Temperature	°F (°C)	-40°F to 248°F (-40°C to 120°C)	-
Thermistor Resistance	kΩ	100 ±3%	@ 77°F (25°C)
Beta	K	3960 ±1%	
Package Type	-	TO-41	-



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